



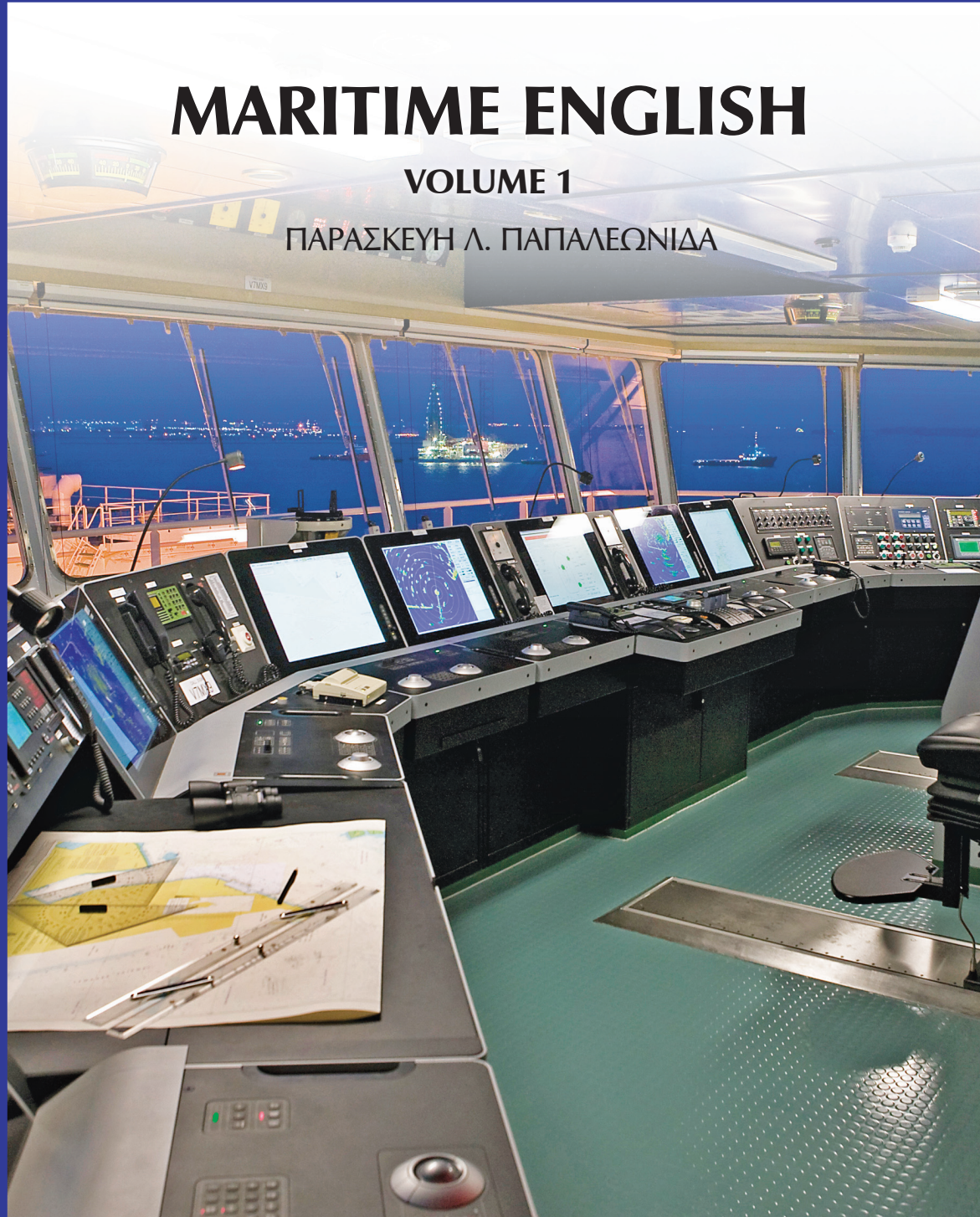
ΧΡΥΣΟΥΝ ΜΕΤΑΛΛΙΟΝ
ΑΚΑΔΗΜΙΑΣ ΑΘΗΝΩΝ

ΕΚΠΑΙΔΕΥΤΙΚΟ ΚΕΙΜΕΝΟ
ΑΚΑΔΗΜΙΩΝ ΕΜΠΟΡΙΚΟΥ ΝΑΥΤΙΚΟΥ

MARITIME ENGLISH

VOLUME 1

ΠΑΡΑΣΚΕΥΗ Α. ΠΑΠΑΛΕΩΝΙΔΑ



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5. Ranks and roles: Duties of deck/engineer cadets

A. "My Life at Sea"

a) Lead-in. Look at the pictures and match them to the following titles.

Fire drill Abandon ship drill Drill review meeting Lifeboat release hook



(a)



(b)



(c)



(d)

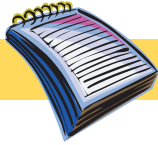
b) Read the following entry to a blog site with the title "My life at sea". Then complete the word webs.



This is my first experience on a merchant vessel. I study Nautical Studies and my curriculum requires seagoing service for a period of 12 months. I will be on board M/V Aurora Leigh for 6 months. I live and work with an international crew, speaking English 24 hours a day. I enjoy my work on board and look with anticipation into the next weeks on board the vessel.

What are the duties of a deck cadet on board? There are two parts in my working day. First I assist on the bridge; and the other part of my activities has to do with the maintenance of the ship.

Every week there are fire drills and abandon ship drills. I have my station bill card where I read what my duties are in emergency situations. Equipped with helmet and life jacket, I go to the muster station. After every fire drill we have an abandon ship drill. During this drill everybody learns how to use the lifeboats, start the engine and use the release hook. Afterwards everybody meets on the

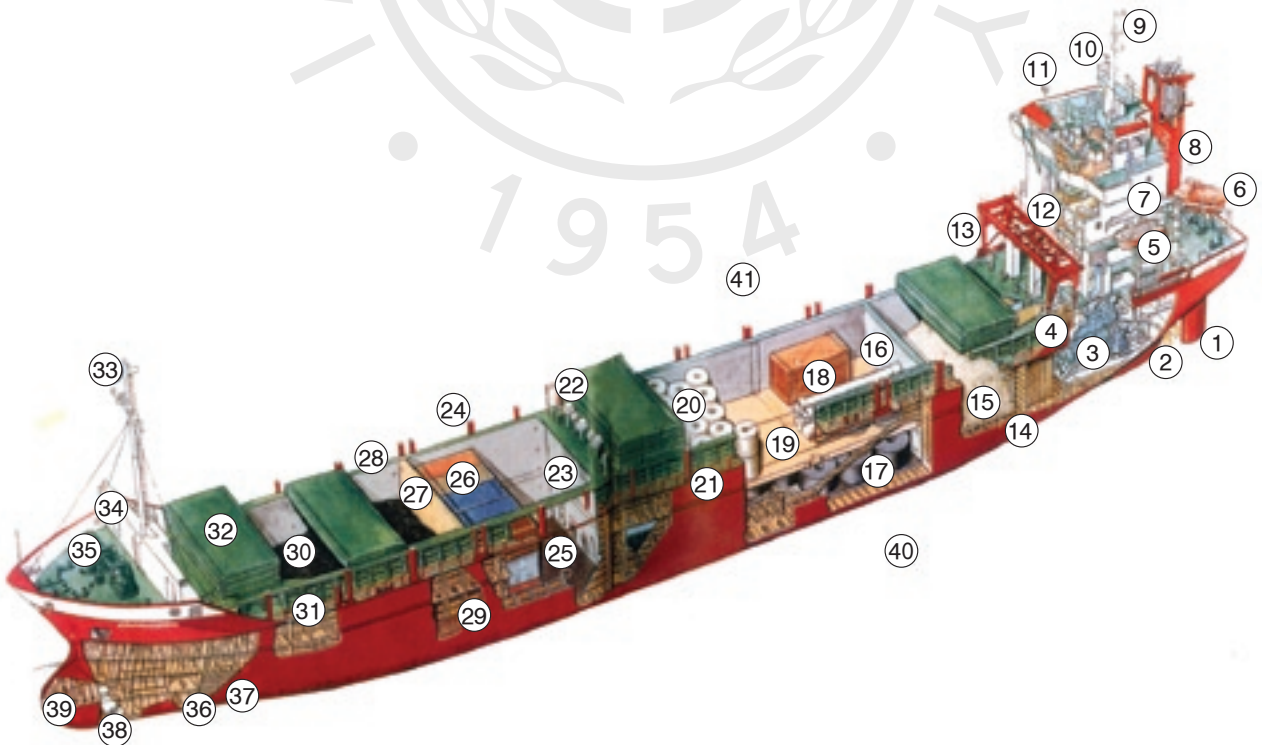


Glossary

ballasting	using water as ballast (in ballast tanks) for keeping the ship stable
trimming	to balance a ship by shifting its cargo
watertight	constructed so tightly as not to leak any water
vertical	the opposite of horizontal
separate	divide, come between
increase	become greater, larger
discharging	unloading
mooring	securing a vessel by cables, wires or ropes to a dock or to a buoy or anchoring with 2 anchors
mooring winch	a machine on a ship used to haul in mooring lines when securing the ship to a pier / wharf / quay

b) Find the following parts on the picture of the Capricorn below.

- No 39 Forepeak tank in bulbous bow
- No 35 Anchor windlass on the forecastle
- No 8 Funnel with all exhaust pipes
- No 1 Rudder
- No 16 / No 23 / No 27 Vertical Bulkheads
- No 19 'tween-decks
- No 12 Accommodation
- No 32 Stacked Hatches



1. The Voyage Route



“1000 nautical miles in the Mediterranean”

Listen to the Chief Officer describing the charted route to the Captain and do the exercises that follow:

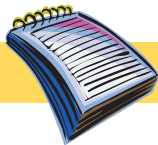
A. Draw the route on the map.



B. Listen again and circle the correct distance.

Passage Plan

From	To	Distance (in nautical miles)
Genoa	Marseille	204 / 240 NM
Marseille	Barcelona	207 / 211 NM
Barcelona	Valencia	130 / 180 NM
Valencia	Cartagena	122 / 172 NM
Cartagena	Gibraltar	237 / 277 NM



Glossary

Traffic Separation Scheme (TSS)

a routing measure which separates opposite streams of traffic and establishes traffic lanes

- A.** *Close listening. Listen carefully to the following passage from an interview and correct the mistakes. Identify which five words are incorrect, even though they sound similar to the correct ones.*



“Nautical charts contain information about the shape of the coast, the lengths of the water and the general configuration of the bottom of the sea floor. Nautical charts also show locations of obstacles to navigation, the rise and fall of the tides, and locations of navigation gates. Nautical charts make safe and efficient marine transportation possible.”

– Aids to Navigation

- a) *Fill in the blanks with the words in the box.*

hazards floating location conformance navigate

Aids to Navigation

Unlike the roads and highways that we drive on, the waterways we go boating on do not have road signs that tell us our (1) _____, the route or distance to a destination, or of (2) _____ along the way. Instead, the waterways have AIDS TO NAVIGATION (or ATONs), which are all those man-made objects used by mariners to determine position or a safe course.

The term “aids to navigation” includes buoys, day beacons, lights, lightships, radio beacons, fog signals, marks and other devices used to provide “street” signs on the water.

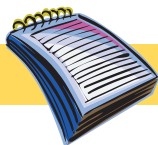
The term “aids to navigation” encompasses a wide range of (3) _____ and fixed objects (fixed meaning attached to the bottom or shore), and consist primarily of:

- **Buoys** – floating objects that are anchored to the bottom. Their distinctive shapes and colours indicate their purpose and how to (4) _____ around them.
- **Beacons** – structures that are permanently fixed to the sea-bed or land. They range from structures such as light-houses, to single-pile poles.

Aids to navigation systems are in (5) _____ to the International Association of Lighthouse Authorities (IALA), which is an international committee that seeks to ensure safe navigation, primarily through the use of common navigation aids and signals.



Buoy: Safe Water Mark




Glossary

determine
encompass
attach
primarily
distinctive

ascertain or establish definitely by calculation
include or contain comprehensively
fasten, join
mainly, chiefly
individually characteristic, distinguishing

2. inflatable / adaptable / convertible / compatible
3. spring / floating / towing / buoyant
4. Position / Place / Location / Point
5. evacuation / abandon / emergency / urgency
6. spotlight / torch / illumination / lantern
7. incidents / errors / happenings / disasters
8. figure / sum / profile / number






National Standard for Commercial Vessels (NSCV) – PART C 7A
Your new safety equipment (1)



Class 2C Non-Passenger Vessels – 60 metres or longer

Seagoing Non-Passenger Vessel, 60 metres or longer, for use in all operational areas up to and including Restricted offshore operations. (*Restricted offshore operations: operations within a limit of 50 nautical miles seaward from designated smooth or partially smooth waters, designated restricted offshore waters or a safe haven*)

REQUIRED SAFETY EQUIPMENT

	Liferafts and rescue boats	<ul style="list-style-type: none"> • (2) Coastal Liferaft(s) for 100% of allowable crew and any other persons on board <u>plus</u> a non-SOLAS Rescue Boat. – Vessels continuously engaged on voyages in operational areas with a monthly mean temperature of 15° C or less must carry an anti-exposure suit for each person assigned to crew the Rescue Boat.
	Lifebuoys	<ul style="list-style-type: none"> • 8 x Lifebuoys: 2 with a light; 2 with a light and smoke signal; 2 with a (3) line; 2 of operator's choice.
	Life jackets	<ul style="list-style-type: none"> • Coastal Life Jacket with a light for 100% of allowable crew and any other persons on board.
	Distress signals	<ul style="list-style-type: none"> • 1 x 406MHz Electronic (4) Indicating Radio Beacon. • 3 x Parachute distress rockets. • 2 x Red hand-held flares. • 1 x Orange hand-held smoke flares.
	On-board communications and alarm systems	<ul style="list-style-type: none"> • General (5) alarm system.
	Emergency lighting (hand-held)	<ul style="list-style-type: none"> • 1 x Battery operated (6) for each crew member.
	Medical supplies	<ul style="list-style-type: none"> • Annex H: Scale F of Table H.3 – The quantity of medical supplies identified in Annex H is based on (7) involving 1 or 2 persons only. – Medical supplies will need to be expanded in accordance with the particular risks inherent to the voyage and the (8) of persons on board.

ii. Match the phrases to make full sentences. Put the correct number in each box.

In the event of a Man Overboard the following steps should be implemented:

- | | |
|--------------------------|--|
| 1. You must shout ... | <input type="checkbox"/> visual contact. |
| 2. You must throw ... | <input type="checkbox"/> "Man Overboard! Starboard / Port side!" |
| 3. You must maintain ... | <input type="checkbox"/> the vessel away from the side that the person went overboard. |
| 4. You must raise ... | <input type="checkbox"/> a Williamson Turn. |
| 5. You must inform ... | <input type="checkbox"/> the nearest lifebuoy overboard. |
| 6. You must turn ... | <input type="checkbox"/> additional lookouts. |
| 7. You must do ... | <input type="checkbox"/> the alarm. |
| 8. You must post ... | <input type="checkbox"/> the bridge. |

a) Look at the pictures of the following safety poster.

What *must* you do when you notice a man overboard and you are...

- on deck? – on the bridge? – at sea? – at anchor or in harbour?



1. Different types of containers

Lead-in: Look at the following list of containers.



- chest / box / case
- pallet / crate / carton
- barrel / drum / cask
- sack / bag / bale

1. How many of these words do you know?
2. Can you identify any of these containers in the pictures below?
3. Which ones are cylindrical, square or rectangular?
4. Which ones are made of wood?
5. What other material are they made of?
6. Which ones can you carry liquids in?

A. Write a caption under each picture. Here are some useful words.

equipment shipping cases	steel barrels	cotton bales
drum	sea chest	crate
configuration of pallets	sacks	drums / barrels on ship
casks	pallet	



(a).....



(b).....



(c).....



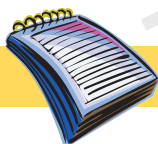
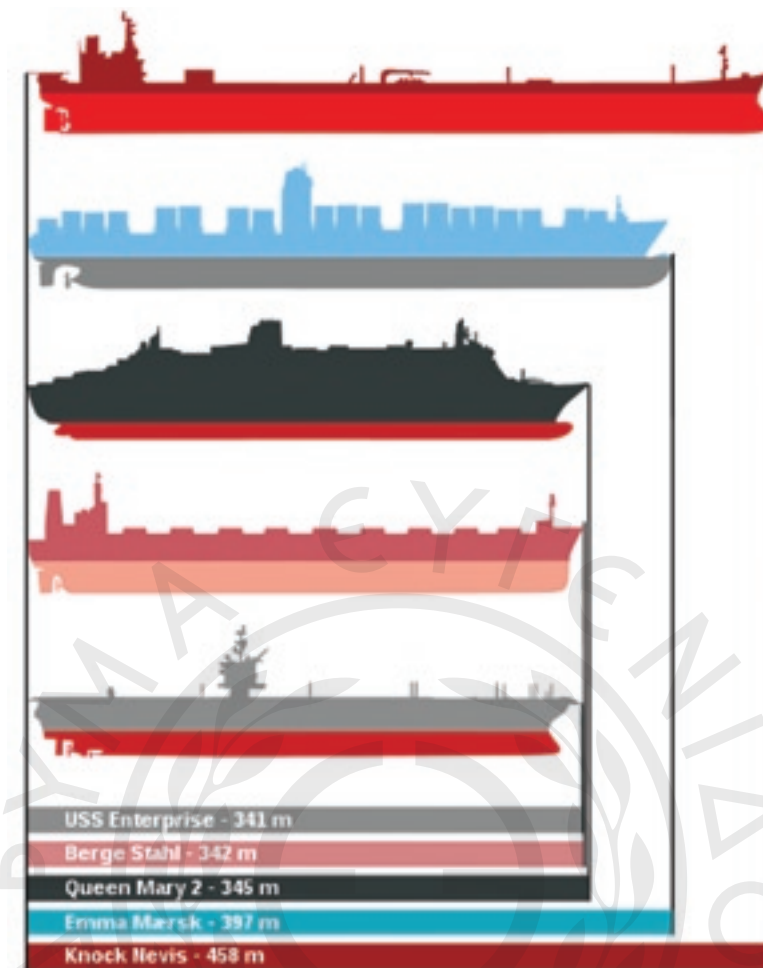
(d).....



(e).....



(f).....



Glossary

allure	quality of being powerfully and mysteriously attractive and fascinating
sister ship	a ship that is one of two (or more) similar ships built at the same time, a ship of the same class and identical design to another ship
feature (v)	to have as a prominent attribute or aspect
maiden voyage	the first voyage of a ship
scrap	to discard or remove from service (an old or inoperative vessel), especially so as to convert it to scrap metal

ii. In pairs, ask and answer the following questions. Add some of your own questions, like the ones given, to compare the ships.



1. What is the world's largest ship in operation now?
2. Which one is bigger, the Queen Mary or the Oasis of the Seas?
3. Is the world's largest bulk carrier longer than the largest container ship?

REQUIRED BOARDING (1) FOR PILOT

In accordance with I.M.O. requirements and I.M.P.A. recommendations

(2) FOR FREEBOARDS OF 9 METRES OR LESS

HANDHOLD STANCHIONS
min. diam. 32mm
120cm above bulwark
min. 70cm
max. 80cm. apart

MAN-ROPES
without knots
min. diam. 28mm
IF REQUIRED BY PILOT
Always flat side of ship

SIDES ROPES
Min. diam. 18mm

STEPS
Must rest against ship's side

SPREADER
Min. 180cm long
Max. 2 steps between

5th step must be a spreader

Height required by pilot

SHIPS WITH HIGH FREEBOARD (MORE THAN 9M)

When no side door available

PILOT LADDER
Must extend at least 2 metres above lower platform

ACCOMMODATION LADDER
Should rest firmly against ship's side
Should lead aft
Maximum 55° slope
Lower platform horizontal
Rigid handrails preferred

A PILOT LADDER COMBINED WITH AN ACCOMMODATION LADDER is usually the safer method of embarking or disembarking a pilot on ships with a freeboard of more than 9 metres

Recommended 9 metre mark
Stem ↔ Bow

0.5m
1m
2m
2m
3 to 7 metres depending on size of pilot launch and height of swell

MECHANICAL PILOT (3)

Davit

Guard ring

Rigid part

Flexible part

Two man-ropes ready for immediate use
Min. diam. 28mm

A pilot hoist made and rigged in accordance with SOLAS Chapter V, together with a pilot ladder, subject to agreement between the Master and the Pilot. It should be noted that the distance between the nearest side ropes of the pilot hoist and pilot ladder will be at least 1.4 metres.

NO! NO! NO! NO! NO! NO!

NO!
No shackles
No knots
No splices

NO!
The steps must be equally spaced

NO!
The steps must be horizontal

NO!
Spreaders must not be lashed between steps

NO!
The side ropes must be equally spaced

NO!
The loops are a tripping hazard for the pilot and can become foul of the pilot launch

Two handhold stanchions rigidly secured to ship's structure

Responsible officer

NO OBSTRUCTIONS

Lifebuoy with self-lighting light

Bulwark ladder secured to ship

AT NIGHT

Pilot ladder and ship's deck lit by forward shining outside light

NO!

Very dangerous ladder too long

Recommended 9 metre mark
Stem ↔ Bow



B. Fill in the blanks with the following words (there are two extra words you do not need to use).

reefer	shipyard	gear	grab
flag	pipe	capacity	

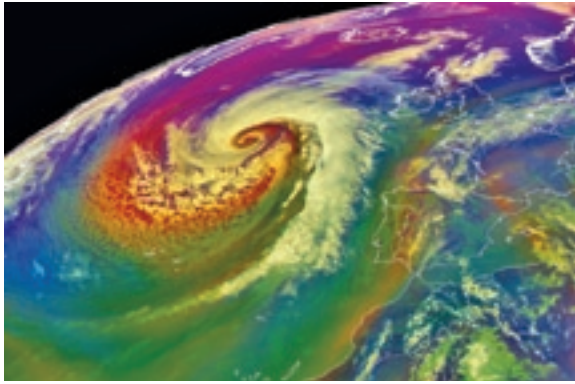
M/V MAERSK BUFFALO is a container ship completed in 2007 in a German _____ and flies the _____ of Denmark. Its maximum TEU _____ is 4,300, and it can carry 1,400 TEU _____ containers. It has no handling _____ of its own.

C. Fill in the missing words.

relative	range	operation
switched	unreliable	manual

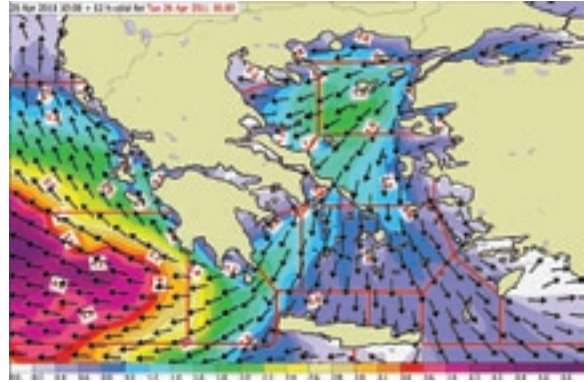
I will give you a briefing on status of navigational aids and equipment:

1. Port side / starboard radar is at 10 miles _____ scale.
2. The radar is _____ head-up.
3. GPS is not in _____.
4. The echo-sounder recordings are _____.
5. I changed to _____ steering at 12.00 hours UTC.
6. Navigation lights are _____ on.



(c)

1. Satellite map with tropical cyclone over North Atlantic.
2. Weather map with weather forecast for North Atlantic.



(d)

1. Wind forecast map: wind force and direction for Greece.
2. Wave forecast map: wave height and direction for Greece.



(e)

1. Sea spray created by large waves.
2. Floating ice around the vessel.



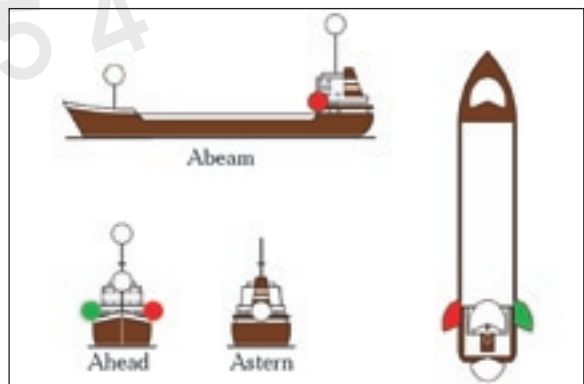
(f)

1. Extreme ice conditions, moderate visibility.
2. Following an icebreaker, poor visibility.



(g)

1. Pilot disembarkation in extreme ice conditions.
2. Towing in extreme ice conditions.









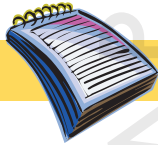
(h)

1. Power-driven vessel underway: Rule 23.
2. Anchored vessel: Rule 30.

C. Put the words in the correct list. Some are given as examples.

Dust mask	Thermal gloves	Welding gauntlets	Impact gloves	Full face mask
Safety boots	Latex gauntlets	Arc welding helmet	Barrier cream	Ear plugs
Riggers gloves	Hard hat	Ear defenders (ear muffs)	Boiler suit	Thermal suit
Half face mask	PVC gloves	Wellington boots	PVC wet suit	Safety shoes

					
Head protection	Foot protection	Hand protection	Respiratory protection	Skin protection	Hearing protection
		Riggers gloves		Boiler suit	Ear defenders (or ear muffs)






Glossary

gauntlet
riggers gloves
respiratory

a strong long glove with a wide covering for the wrist
gloves for rigging, fitting equipment, handling ropes, etc.
connected with breathing

D. Match the PPE words given in the table above to the correct picture/description below.

1.	 dust mask Protects from: non-toxic, heavy dust particles such as some cargo dusts and abraded paint dust.
2.	 Protects from: arc welding light, radiation and splatter (also, a flame retardant scarf and apron should always be worn when arc welding).
3.	 Protects from: falling objects, swinging lines, hair entanglement, chemical, paint and hot water drips.



5. The tanker under the bridge.



6. The crew members the cargo hoses.



7. The vessels each other for an STS operation.



8. The helicopter on the vessel.



9. They the lifeboat.



10. The tugs the vessel.



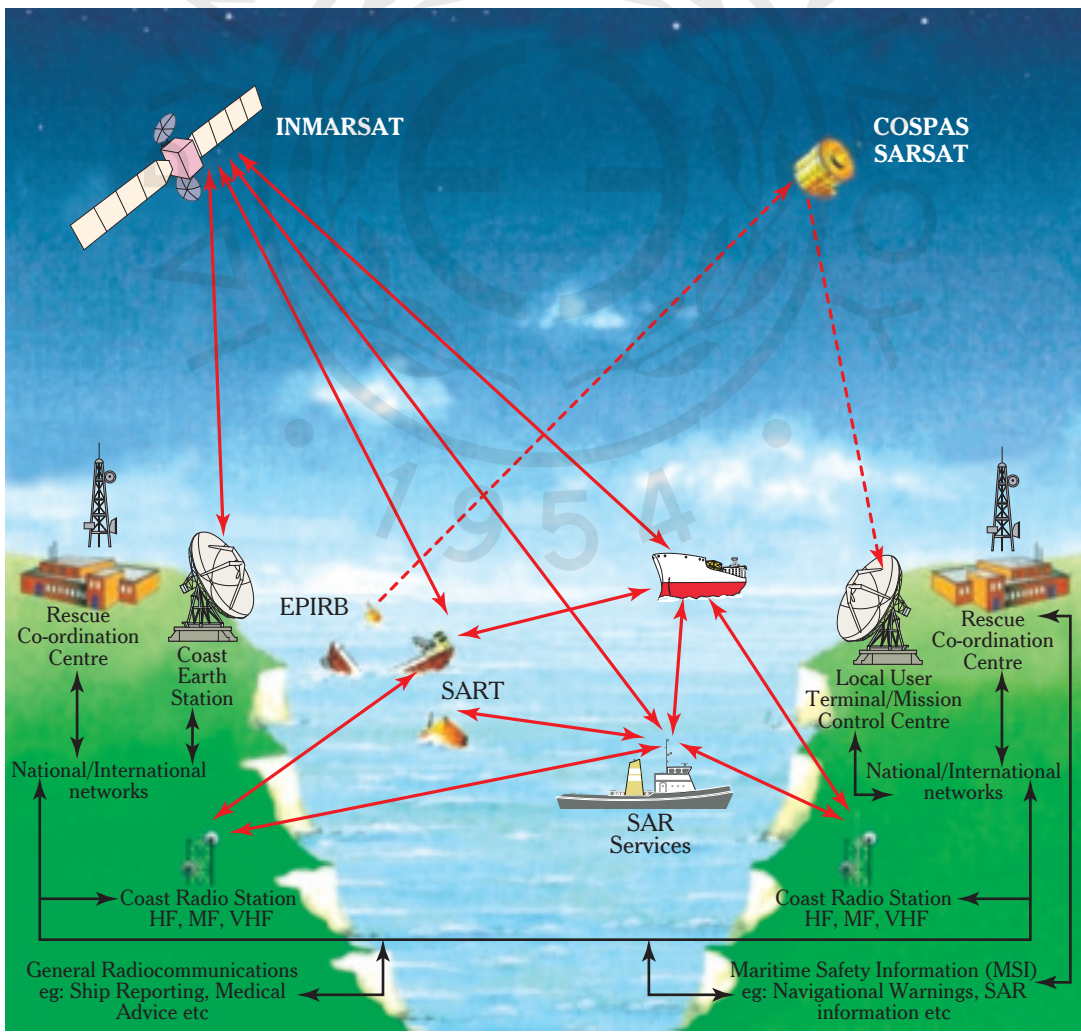
11. They the containers.



12. They the fenders.

<p>DSC provides a simple and reliable means (4)..... contact prior to starting voice communication. The DSC controller sends a digital signal that will ring other DSC radios by triggering an alarm and displaying details about the caller and the nature of the call. The digitally transmitted information (e.g. MMSI number, distress position) is displayed in writing. When a DSC call is received by another station, its VHF radio (5)..... and details of the call are displayed. Once a DSC call has been transmitted to a particular station or to all stations in the area, a voice message should be sent in the normal way.</p>	<p><i>A Received DSC message contains the following:</i></p> <p>From: MMSI number</p> <p>Nature of distress: explosion / fire, flooding, collision, grounding, listing, sinking, (6)....., piracy, undesignated distress.</p> <p>UTC</p> <p>Lat, Long, bearing or range</p>
--	---

disabled & adrift	under GMDSS	full implementation
starts ringing an alarm	specified	of establishing





VHF Marine Transceiver with DSC



URGENCY MESSAGE (GMDSS vessels)

i. Urgency announcement sent by DSC:



ii. The following calling sequence is transmitted by DSC:

Format specifier	Category	Self identifier	Frequency or channel	Subsequent communications
All ships	URGENCY	259896000	Channel 16	radiotelephony

All ships urgency announcement by Doris (259896000).

iii. Urgency call and message by voice:

PAN PAN PAN PAN PAN PAN
ALL STATIONS ALL STATIONS ALL STATIONS
THIS IS TWO FIVE NINE EIGHT NINE SIX ZERO ZERO ZERO MOTOR
 TANKER DORIS
CALL SIGN LIMA ALFA GOLF PAPA FIVE
POSITION FOUR FIVE DEGREES FOUR SIX MINUTES NORTH ZERO
 ZERO ONE DEGREES THREE ZERO MINUTES WEST
 I HAVE PROBLEMS WITH ENGINES, HEAVY FISHING NET HAS FOULED
 MY PROPELLER, I AM DRIFTING TOWARDS MILE ROCK DUE TO A
 CURRENT OF THREE DECIMAL FIVE KNOTS
OUT



Cutter
a tool for cutting



Side cutter
diagonal cutting pliers,
used for cutting wire



Hacksaw
a saw with a narrow
blade set in a frame,
used for cutting metal



Cutting torch
a device that uses fuel
gases and oxygen to cut
metals

machining and ... hammering



Mallet
a hammer with a
large wooden (or
plastic) head



**Straight-peen (or "peen")
hammer**
a hammer with a flat
striking face on one end
of the head for striking
punches and chisels



**Ball-peen (peen)
hammer**
a hammer with one
end of the head flat
and the other end
rounded, used for
forming soft metal



Centre punch
a small steel tool with a
conical tip used to punch
a small indentation at the
location of the centre of a
hole to be drilled



Cold chisels
tools with cutting
edges used for
cutting and shaping
cold metal (they
are struck with a
hammer)

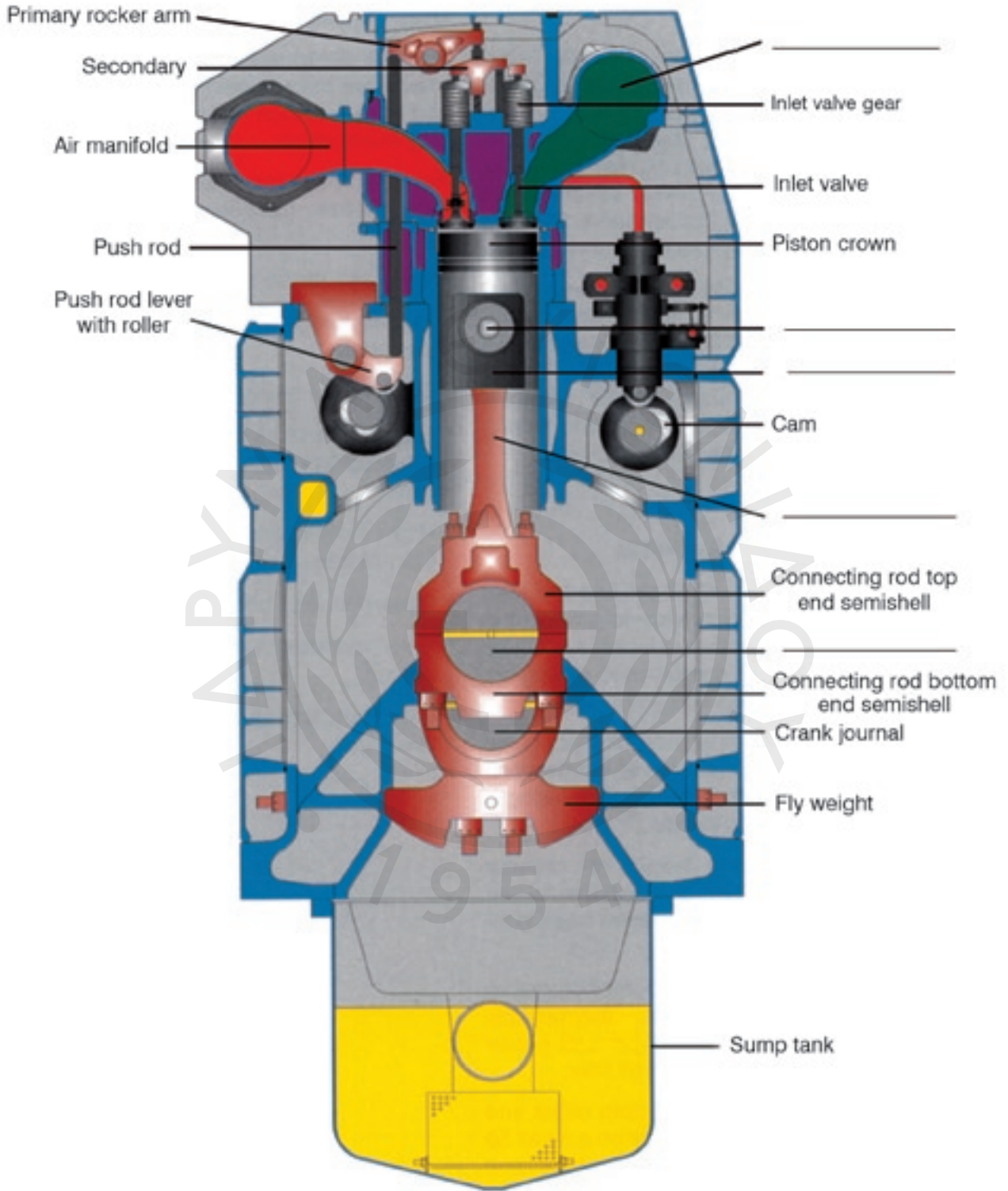


Fitter's vise (or vice)
a metal tool with
movable jaws which are
used to hold an object
firmly in place while
work is done



Conventional lathe

A lathe is a machine tool which turns cylindrical material, touches a cutting tool to it, and cuts the material in order to shape it. It is used to perform various operations such as sanding, drilling or deformation.

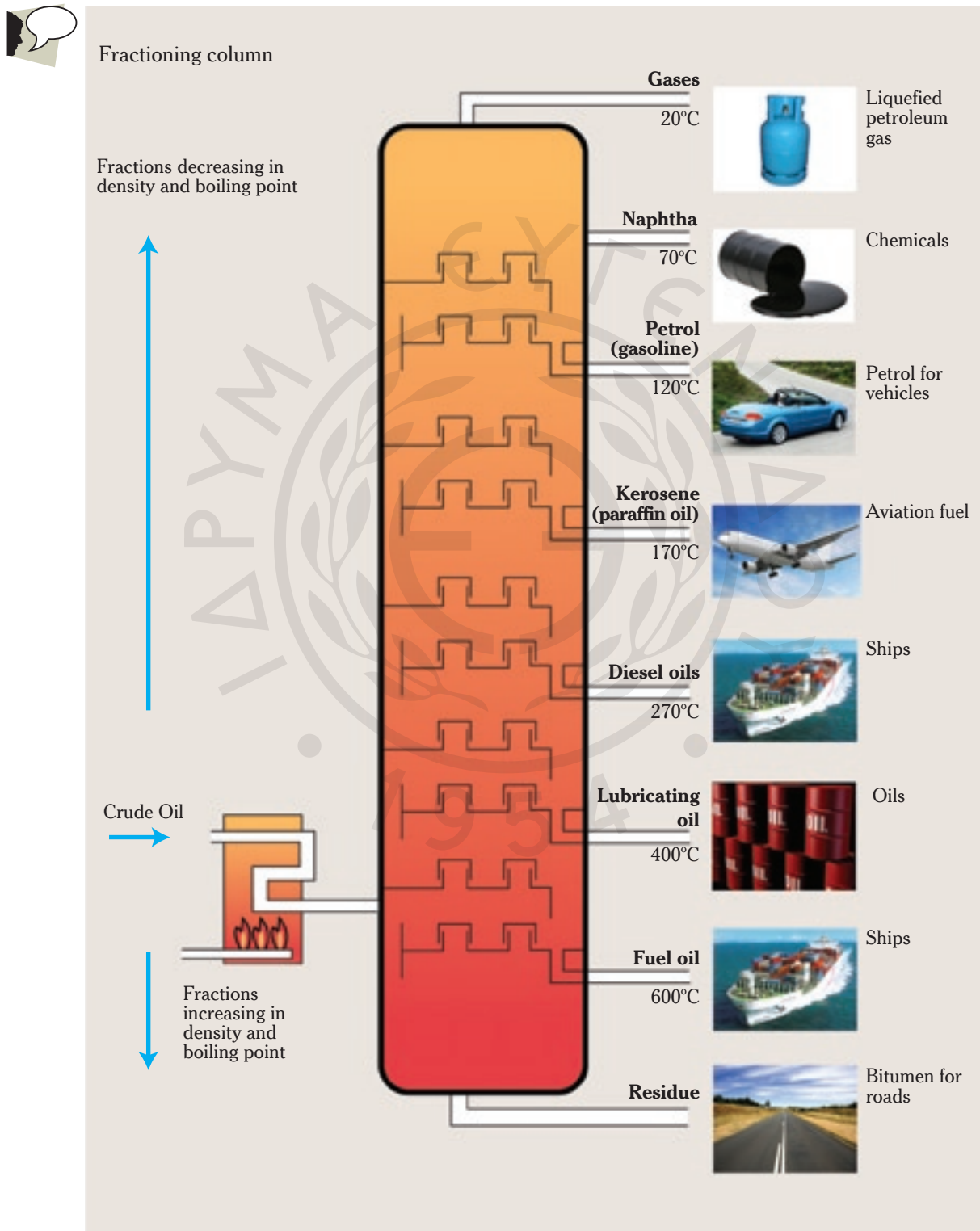


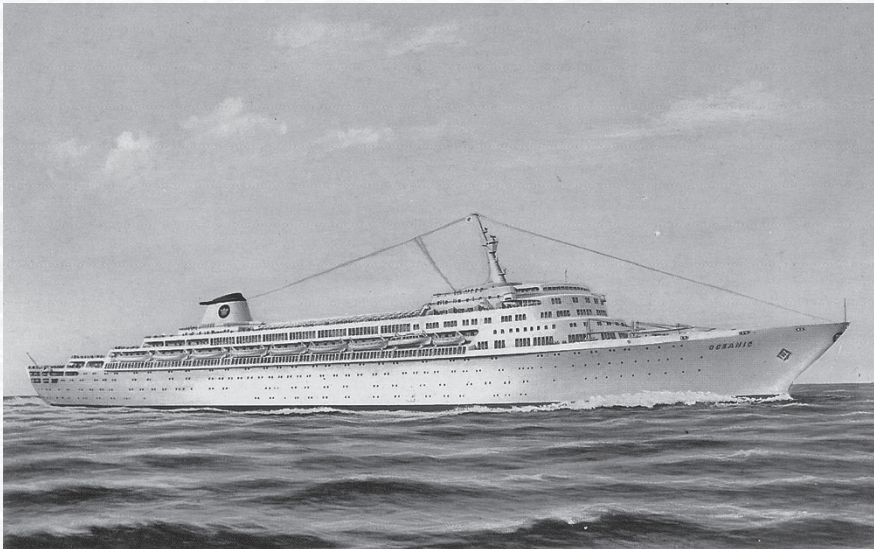
Four-stroke Diesel engine

I. HFO / MDO

Lead-in:

A. What is going on in this tower (column)?





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